

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-9 (Canceled)

Claim 10 (Presently amended) A fuel processor comprising:

a fuel reforming unit having a fluid inlet for varying the rate of input of a first stream of a fluid into the fuel reforming unit;

a hydrogen-cleanup unit having a fluid inlet for varying the rate of input of a second stream of the fluid into the hydrogen-cleanup unit;

a fluid conduit for providing the fluid to a fuel cell, the fluid conduit having a fluid inlet for varying the rate of input of a third stream of the fluid into the fuel cell;

a first sensor associated with the fuel reforming unit;

a second sensor associated with the hydrogen-cleanup unit;

a third sensor associated with the fuel cell, wherein at least one of the first sensor, the second sensor, or the third sensor is not a fluid flow rate sensor; and

a control system regulating the rate of the first fluid stream based upon feedback from the first sensor, wherein such regulation occurs with a first time constant, the control system further regulating the rate of the second fluid stream and the third fluid stream based upon the feedback from the second sensor and the third sensor respectively, wherein the regulation of at least one of the second fluid stream and the third fluid stream ~~occurs with a~~ are regulated so that the second fluid stream and the third fluid stream satisfy at least one criterion selected from: i) having a regulatory time

constant that is at least about three times greater than the time constant of regulation of the first fluid stream; and ii) ~~having a flow volume that is less than about 10% of the average flow volume of the first fluid stream.~~

Claim 11 (Previously presented) The fuel processor of claim 10, wherein the first sensor comprises a fluid flow rate sensor.

Claim 12 (Original) The fuel processor of claim 10 wherein the fluid is air.

Claim 13 (Previously presented) The fuel processor of claim 12 wherein the control system varies the rate of the first fluid stream by controlling a compressor coupled to the first inlet.

Claim 14 (Original) The fuel processor of claim 13 wherein the air from the compressor is fed to a plenum, and from the plenum to a plurality of fuel processor components via at least one controllable valve.

Claim 15 (Canceled)

Claim 16 (Previously presented) The fuel processor of claim 13 wherein the rate of input of the first fluid stream is controlled by varying the output of the compressor.

Claim 17 (Previously presented) The fuel processor of claim 16 wherein the rate of input of the second fluid stream or the third fluid stream is controlled by adjusting valves associated with the hydrogen-cleanup unit and the fuel cell.

Claim 18 (Previously presented) The fuel processor of claim 10 further comprising:

a tail gas combustor having a fluid inlet for varying the rate of input of a fourth stream of the fluid, wherein the control system regulates the rate of each of the first fluid stream, the second fluid stream, the third fluid stream, and the fourth fluid stream.

Claim 19 (Original) The fuel processor of claim 10 wherein the fuel reforming unit comprises a partial oxidation reformer.

Claim 20 (Original) The fuel processor of claim 10 wherein the fuel reforming unit comprises an autothermal reformer.

Claim 21 (Original) The fuel processor of claim 10 wherein the fuel reforming unit comprises a pure steam reformer.

Claim 22 (Previously presented) The fuel processor of claim 10 wherein the hydrogen-cleanup unit comprises at least one of a water gas shift reactor and a preferential oxidation reactor.

Claim 23 (Original) The fuel processor of claim 10 wherein the fluid comprises water.

Claim 24 (Original) The fuel processor of claim 10 wherein the fluid comprises fuel.

Claim 25 (Original) The fuel processor of claim 10 wherein the control system varies the rate of fluid flow at the inlet by controlling a pump coupled to the first inlet.

Claim 26 (Previously presented) The fuel process of claim 10 wherein the feedback from the first sensor is a fuel flow rate or an air flow rate into the fuel reforming unit, or a temperature in the fuel reforming unit.

Claim 27 (Previously presented) The fuel process of claim 10 wherein the feedback from the second sensor is a temperature or a carbon monoxide concentration in the hydrogen-cleanup unit, or an air flow rate into the hydrogen cleanup unit.

Claim 28 (Previously presented) The fuel process of claim 10 wherein the feedback from the third sensor is an electricity production rate or an electricity demand rate.

Claim 29 (New) The fuel process of claim 10 wherein the second fluid stream and the third fluid stream are regulated so that the second fluid stream and the third

fluid stream have a flow volume that is less than about 10% of the average flow volume of the first fluid stream.